PACOTS

PACIFIC ORGANIZED TRACK SYSTEM (PACOTS) GUIDELINES

1. General Information

- a. Geographical Boundary. PACOTS tracks may be established within the Oakland Oceanic, Fukuoka, and Anchorage FIRs.
- b. Track Definition Message (TDM). Oakland ARTCC is using the TDM format for PACOTS track publication. Questions regarding published PACOTS tracks should be directed to Oakland ARTCC Traffic Management Unit (TMU), at (510) 745-3771.
- c. Number and Designator of PACOTS Tracks
 - (1) Oakland ARTCC or Fukuoka Air Traffic Management Center (ATMC) may develop more or fewer tracks according to user needs, military activity, significant weather, or other limitations.

(2) ROUTES TRACK DESIGNATORS

| Hawaii to Japan | A |
|------------------------------------|------------------|
| Hawaii to Japan | B (optional) |
| Japan to Hawaii | 11 |
| Japan to Hawaii | 12 (optional) |
| North American West Coast to Japan | |
| North American West Coast to Japan | D (optional) |
| North American West Coast to Japan | E & F |
| Japan to North American West Coast | 1, 2, & 3 |
| Japan to North American West Coast | 4 (optional) |
| Texas to Japan | M |
| Japan to Texas | 8 |
| North American West Coast to Asia | H & I (optional) |
| North American West Coast to Asia | J & K |
| Asia to North American West Coast | 14 |
| Asia to North American West Coast | 15 (optional) |

d. Usable Flight Levels

- (1) All IFR flight levels at or above FL290 except the Westbound North America-Japan PACOTS which also includes FL280 in the Oakland OCA/FIR. The Westbound North America-Japan PACOTS are included in the Track Advisory Program. Certain restrictions may apply for non-PACOTS traffic operating in the opposite direction to the published PACOTS system.
- e. Lateral Spacing of Tracks
 - (1) PACOTS Tracks are established at least 50 NM apart. Tracks are defined using latitude/longitude expressed in whole degrees or named waypoints with the possible exception of FIR crossing points.

f. Flight Planning

- (1) The following flight planning restrictions and rules only apply within the oceanic control areas of the respective FIRs. Furthermore, these restrictions do not affect aircraft filing on ATS routes in the CEP route system or the NOPAC Composite Route System unless individual routes within these systems are specifically identified as unusable in NOTAMs.
 - (a) Participating Aircraft
 - 1. Aircraft requesting altitudes at or above FL280 may file via route published in the daily NOTAM or track message.
 - 2. Operators may file to leave or join an outer PACOTS track at any reporting point. Aircraft leaving an outer track should file routes that diverge, within 10 degrees of longitude, to at least 50 NM from the nearest PACOTS track. Flight level assignment for aircraft joining an outer track will be based on traffic.

- 3. Operators must file appropriate SIDs and STARs associated with the departure/arrival airports.
- 4. Operators must flight plan to avoid active military airspace.
- (b) Non-Participating Aircraft. Random or Crossing routes under the PACOTS at FL270 and below are permitted, unless otherwise prohibited by NOTAM. Higher Altitude may be approved if traffic permits.

g. ATC Procedures

- (1) For flight planning and initial clearances, crossing between PACOTS tracks at FL280 and above will not be permitted. Once established on the PACOTS track, changes may be approved as traffic permits.
- (2) Aircraft should not expect to climb into the PACOTS traffic unless filed on a route corresponding to a PACOTS track. In this case, climb into the PACOTS will be approved as traffic permits.
- (3) The minimum longitudinal separation between aircraft crossing the Fukuoka FIR boundary on the same track at the same flight level will be 10 minutes using Mach Number Technique or applicable ADS-C distance-based separation standard.

h. Position Reporting

(1) Within the Oakland and Anchorage oceanic control areas position reports shall be made using latitude/longitude coordinates or named fixes as specified in the TDM. Position reports shall comprise information on present position, estimated next position, and ensuing position in accordance with ICAO procedures. Rounding off geographical coordinates is prohibited.

2. Eastbound Japan-Hawaii PACOTS

- a. Time Frame
 - (1) Effective daily 1000-2100 UTC for aircraft crossing 160 degrees east longitude between 1200 and 1600 UTC.
- b. Notification of Japan-Hawaii PACOTS
 - (1) Notification of the geographical coordinates of Track 11 and optional Track 12 will be transmitted by TDM and NOTAM at approximately 2200 UTC daily by Fukuoka ATMC.
- c. Flight Planning
 - (1) Participating eastbound aircraft departing from or traversing Central West Japan and crossing 160 degrees east longitude between 1200 UTC to 1600 UTC should flight plan as described in the daily TDM and NOTAM.
- d. User Preferred Routes (UPR)
 - (1) Aircraft Operators have the option of flight planning a UPR instead of utilizing the Japan Hawaii PACOTS.
 - (2) No altitude penalties will be incurred by aircraft flight planning a UPR that conflicts with PACOTS Track 11 or 12.
 - (3) The details and procedures for flight planning Japan Hawaii UPRs are detailed in this website under User Preferred Routes.

3. Westbound Hawaii-Japan PACOTS

- a. Time Frame
 - (1) Effective daily 1900-0800 UTC for aircraft crossing 160 degrees east longitude between 2300 and 0600 UTC.
- b. Notification of the Hawaii-Japan PACOTS
 - (1) Notification of the geographical coordinates of Track A and optional Track B will be transmitted by TDM and NOTAM at approximately 1100 UTC daily by Oakland ARTCC.
- c. Flight Planning

- (1) Participating westbound aircraft departing Hawaii to Japan and crossing 160 degrees east longitude between 2300 UTC and 0600 UTC should flight plan as described in the daily TDM and NOTAM.
- d. User Preferred Routes (UPR)
 - (1) Aircraft Operators have the option of flight planning a UPR instead of utilizing the Hawaii Japan PACOTS.
 - (2) No altitude penalties will be incurred by aircraft flight planning a UPR that conflicts with PACOTS Track A or B.
 - (3) The details and procedures for flight planning Hawaii Japan UPRs are detailed in this website under User Preferred Routes.

4. Eastbound Japan/Asia - North America PACOTS

- a. Time Frame
 - (1) Effective daily from 0500 UTC to 2300 UTC applies to traffic crossing 160 degrees east longitude between 0700 UTC and 1400 UTC.
- b. Notification of the Japan-North America PACOTS
 - (1) Notification of the geographical coordinates of the selected PACOTS tracks will be transmitted by TDM and NOTAM at approximately 2200 UTC daily by Fukuoka ATMC. Number will designate tracks with the northernmost being referred to as TRACK 1.
- c. Flight Planning
 - (1)Participating aircraft from or over Japan to North America and crossing 160 degrees east longitude between 0700 UTC and 1400 UTC should flight plan as described in the daily TDM and NOTAM.
- d. User Preferred Routes (UPR)
 - (1) Aircraft Operators have the option of flight planning a UPR instead of utilizing the PACOTS Track 1, 3, 14 or 15.
 - (2) The details and procedures for flight planning PACOTS Track 1, 3, 14 and 15 UPRs are detailed in this website under User Preferred Routes.

5. Westbound North America-Japan PACOTS

- a. Time Frame
 - (1)Effective daily from 1900 UTC to 0800 UTC. Required for traffic crossing 160 degrees east longitude between 0000 UTC and 0600 UTC.
- b. Notification of Tracks
 - (1) Notification of selected PACOTS tracks will be transmitted by TDM and NOTAM at approximately 1100 UTC daily by Oakland ARTCC. The number of tracks each day will be determined by the position of the jet stream.
- c. Flight Planning
 - (1) Participating aircraft flying from North America to the Fukuoka FIR and crossing 160 degrees east longitude between 0000 UTC and 0600 UTC should flight plan as described in the daily TDM and NOTAM.
- d. User Preferred Routes (UPR)
 - (1) Aircraft Operators have the option of flight planning a UPR instead of utilizing PACOTS Tracks F.
 - (2) The details and procedures for flight planning PACOTS F UPRs are detailed in this website under User Preferred Routes.

6. Westbound North American-Asia PACOTS

- a. Westbound PACOTS tracks serving destinations in Asia are published twice daily.
- b. Time Frame

- (1) Tracks H and I are applicable for traffic crossing 160 degrees east longitude between 0200 UTC and 0600 UTC.
- (2) Tracks J and K are applicable for traffic crossing 160 degrees east longitude between 1400 UTC and 2100 UTC.
- c. Notification of Tracks
 - (1) Notification of PACOTS "H" and "I" will be transmitted by TDM and NOTAM at approximately 1100 UTC.
 - (2) Notification of PACOTS "J" and "K" will be by TDM and NOTAM at approximately 0000 UTC.
- d. Flight Planning
 - (1)Participating aircraft flying between North America and Asia should flight plan as described in the daily TDM and NOTAM.
- e. User Preferred Routes (UPR)
 - (1) Aircraft Operators have the option of flight planning a UPR instead of utilizing PACOTS Tracks H, I or K.
 - (2) The details and procedures for flight planning PACOTS H, I and K UPRs are detailed in this website under User Preferred Routes.